REMARKS

Reexamination and reconsideration in light of the foregoing amendments and following remarks is respectfully requested.

Claims 1-5 and 7-10 are pending in this application. Claim 6 has been canceled without prejudice or disclaimer. No new matter has been added to the application. Support for the amendments can be found at page 13, lines 13-22; page 19, lines 14-21; page 33, line 7 to page 34, line 4; and Figs. 2A, 2B, 3A and 3B.

Applicants note the Examiner's consideration of the information cited in the Information Disclosure Statement filed April 11, 2002, as acknowledged in the Office Action Summary and in the Office Action. Applicants further note the Examiner's acknowledgment of Applicants' claim for foreign priority under 35 U.S.C. § 119 and receipt of the certified priority document.

The title of the invention was objected to by the Examiner. It has been changed to read: LIGHT REFLECTING PLATE, PRODUCTION PROCESS THEREOF, AND LIQUID CRYSTAL DISPLAY DEVICE USING THE LIGHT REFLECTING PLATE. It is believed that by this amendment the objection is overcome.

Process claims 7 and 8 have been objected to as being improperly dependent on device claim 1. Applicants traverse this objection. There is no rule that prohibits a process claim to be dependent on a device claim. Claims 7 and 8 are not indefinite or ambiguous as a result of the dependency. The process of claim 7 is directed to making the light reflecting plate recited in claim 1 and claim 7 specifies the process for making the same. Accordingly, it is respectfully requested that the rejection be reconsidered and withdrawn.

REJECTION UNDER 35 U.S.C. § 112

Claims 1, 7-10 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular, the Examiner made the following findings for indefiniteness:

1. The Examiner did not find antecedent basis for the phrase "the single-layer powder coating formed in the late step" in claim 7. The language "in the late step" has been deleted. It is believed that by this amendment, the rejection is overcome.

2. The Examiner found that the phrase "the binder layer having tackiness is brought into contact with the power [sic, powder] particles and a medium vibrated in a container" in claim 8 to be unclear. The language has been amended to recite --the binder layer having tackiness is brought into contact with a vibrating mixture of the powder particles and a medium in a container--. It is believed that by this amendment, the rejection is overcome.

3. The Examiner found that the term "them" in claims 1, 9 and 10 was indefinite. The claims have been amended to delete the term. It is believed that by this amendment, the rejection is overcome.

For all of the foregoing reasons, it is believed that the rejections under 35 U.S.C. § 112, second paragraph, have been overcome. Accordingly, it is respectfully requested that the rejections be reconsidered and withdrawn.

REJECTION OF CLAIMS 1-8 UNDER 35 U.S.C. § 102

Claims 1-8 were rejected under 35 U.S.C. § 102(b) as being anticipated by Kuo et al. (U.S. Patent No. 5,714,247). Claim 6 has been canceled, thereby rendering the rejection as to claim 6 moot.

Claim 1 has been amended to recite that the substrate is provided with a binder layer to render the substrate surface tacky and that the powder particles are fixed to the substrate surface by the binder layer to cover the substrate. This feature is not disclosed by Kuo et al.

Kuo et al. disclose a non-specular reflector comprising a substrate, a resin layer, and particles having a size similar to the thickness of the resin layer. The particles are suspended in the resin layer and the metallic layer is formed on an upper surface of the resin layer, and not on the metal powder. As shown, for example, in FIG. 5 of Kuo et al., particles **53** and **54** are suspended in a resin layer **52**, i.e., the powder particles are completely embedded in the resin layer **52**, and the metallic layer **55** is formed on a surface of the resin layer **52**.

Suspension of the particles in the resin layer is also evident from the description of Kuo et al. at col. 4, lines 21-44 of the disclosure wherein the methods of forming the layers is recited. According to a first method, a resin solution with particles contained therein is applied to a substrate. According to a second method, a resin solution is applied to a substrate to form a resin layer, particles are distributed over the resin layer, and the layer is bakedi at 90 to 250°C. The baking step causes the resin layer to soften or melt, and therefore, the particles sink into the resin layer and are suspended therein. Whichever method is employed for the fabrication of the non-specular reflector of Kuo et al., the particles are suspended in the resin layer, and the metallic layer is formed on the surface of the resin layer, and not on the particles themselves.

In the present invention, the powder particles are fixed to the surface of a substrate in monoparticle layer via the binder layer so that the substrate is covered by the monoparticle layer. The metallic layer is formed on individual particles in the monoparticle layer. Unlike the non-specular reflector of Kuo et al., the light reflecting plate according to the invention of the subject

application is not directed to a structure in which the particles are suspended in a resin layer and a metallic layer is arranged on the resin layer.

For all of the foregoing reasons, claims 1-5, 7 and 8 are not anticipated by Kuo et al. Accordingly, it is respectfully requested that the rejection be reconsidered and withdrawn.

REJECTION OF CLAIM 10 UNDER 35 U.S.C. § 102

Claim 10 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Obara et al. (Japanese Publication No. JP404267220A). Claim 10 has been amended to recite that the substrate is provided with a binder layer and that the powder particles are fixed by the binder layer to cover the substrate.

Obara et al. disclose an electro-optical device including a liquid crystal cell with a liquid crystal layer **8** held between a combination of opposing substrates **2** and **3**. The liquid crystal cell is provided with a reflecting layer arranged on a surface of one of the substrates, namely substrate **3**. Obara et al. disclose a reflecting layer formed of an organic film **4**, in which fine particles are dispersed to present a rugged surface. A metallic film **6** is arranged on the rugged surface. It should be noted, however, that in the reflecting layer of Obara et al., the rugged surface is formed owing to the dispersion of the fine particles in the organic film and that the metallic film is arranged on the organic film. Accordingly, the reflecting layer of Obara et al. is a different in structure from the reflecting plate according to the invention of the subject application. In other words, the reflecting layer of Obara et al. is not equipped with such a structure that fine particles are laid over a binder-layer-equipped substrate and are fixed in a monoparticle layer via the binder layer and a metallic layer is arranged directly on individual particles in the monoparticle layer.

For all of the foregoing reasons, claim 10 is not anticipated by Obara et al. Accordingly, it is respectfully requested that the rejection be reconsidered and withdrawn.

REJECTION UNDER 35 U.S.C. § 103

Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Obara et al. (Japanese Publication No. JP404267220A) in combination with Kawamoto et al. (Japanese Publication No. JP411002709A). The arguments with respect to the patentability of claim 10 over Obera et al. are applicable to the rejection of claim 9 and are incorporated herein by reference. The Examiner concedes that Obera et al. "fail to disclose that the light reflecting plate is provided on the external side of one of the transparent substrates." For this deficiency, the Examiner relies on Kawamoto et al.

Kawamoto et al. does not make up for the deficiency of Obera et al. in that the reference does not disclose a liquid crystal display device wherein fine particles are laid over a binder-layer equipped substrate and wherein the particles are fixed in a monoparticle layer via the binder layer and a metallic layer is arranged directly on individual particles in the monoparticle layer. Kawamoto et al. disclose a semitransparent reflector, which is formed of a transparent polymer film; a rugged layer composed of a layer of particles and formed on the film; and a thin metallic film layer formed on the rugged layer. Kawamoto et al. also disclose in claim 2 that the rugged layer is composed of a substantially single layer of closely packed particles. Concerning the formation of the rugged layer, Kawamoto et al. disclose at col. 5, line 45 et seq. that: "The rugged layer can be formed, for example, by applying a liquid formulation (particle dispersion), which is composed of particles and a binder, onto a transparent polymer film. It can also be formed by applying the particle dispersion to form a particle layer and by further applying a resin onto the particle layer."

Similar descriptions are also found in claims 3, 9 and 10 of Kawamoto et al. In the semitransparent reflector of Kawamoto et al., the rugged layer is therefore formed of the particles and the binder, and the binder exists between the individual particles and also on the surfaces of the particles to form a gently rugged surface. The semitransparent reflector of Kawamoto et al., therefore, does not have such a structure that as in the invention of the subject application, i.e., fine particles which are laid on a binder-layer-equipped substrate to fix the fine particles in a state of a monoparticle layer via the binder layer and a metallic layer is arranged directly over individual particles in the monoparticle layer.

For all the foregoing reasons, claim 9 is not obvious over the combined teachings of Obera et al. and Kawamoto et al. Accordingly, it is respectfully requested that the rejection be reconsidered and withdrawn.

CONCLUSION

For the foregoing reasons, it is submitted that the claims 1-5 and 7-10 satisfy the requirements of 35 U.S.C. § 112 and are patentable over the teachings of the prior art relied upon by the Examiner. Accordingly, favorable reconsideration of the claims is requested in light of the preceding amendments and remarks. Allowance of the claims is courteously solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including

extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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